Name_____

Solving Quadratic Equations with Square Roots

Date_____ Period____

Solve each equation by taking square roots.

1) $k^2 = 76$

2) $k^2 = 16$

3) $x^2 = 21$

4) $a^2 = 4$

5) $x^2 + 8 = 28$

6) $2n^2 = -144$

7) $-6m^2 = -414$

8) $7x^2 = -21$

9) $m^2 + 7 = 88$

10) $-5x^2 = -500$

11) $-7n^2 = -448$

12) $-2k^2 = -162$

13) $x^2 - 5 = 73$

14) $16n^2 = 49$

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15) $n^2 - 5 = -4$

16) $n^2 + 8 = 80$

17) $7v^2 + 1 = 29$

18) $10n^2 + 2 = 292$

19) $2m^2 + 10 = 210$

20) $9n^2 + 10 = 91$

21) $5n^2 - 7 = 488$

22) $8n^2 - 6 = 306$

23) $10n^2 - 10 = 470$

24) $8n^2 - 4 = 532$

25) $4r^2 + 1 = 325$

26) $8b^2 - 7 = 193$

27) $2k^2 - 2 = 144$

28) $3 - 4x^2 = -85$

LIVEWORKSHEETS

Name_____

Solving Quadratic Equations with Square Roots

Date_____ Period____

Solve each equation by taking square roots.

1) $k^2 = 76$

$\{8.717, -8.717\}$

2) $k^2 = 16$

$\{4, -4\}$

3) $x^2 = 21$

$\{4.582, -4.582\}$

4) $a^2 = 4$

$\{2, -2\}$

5) $x^2 + 8 = 28$

$\{4.472, -4.472\}$

6) $2n^2 = -144$

No solution.

7) $-6m^2 = -414$

$\{8.306, -8.306\}$

8) $7x^2 = -21$

No solution.

9) $m^2 + 7 = 88$

$\{9, -9\}$

10) $-5x^2 = -500$

$\{10, -10\}$

11) $-7n^2 = -448$

$\{8, -8\}$

12) $-2k^2 = -162$

$\{9, -9\}$

13) $x^2 - 5 = 73$

$\{8.831, -8.831\}$

14) $16n^2 = 49$

$\{1.75, -1.75\}$

LIVEWORKSHEETS

15) $n^2 - 5 = -4$

$\{1, -1\}$

16) $n^2 + 8 = 80$

$\{8.485, -8.485\}$

17) $7v^2 + 1 = 29$

$\{2, -2\}$

18) $10n^2 + 2 = 292$

$\{5.385, -5.385\}$

19) $2m^2 + 10 = 210$

$\{10, -10\}$

20) $9n^2 + 10 = 91$

$\{3, -3\}$

21) $5n^2 - 7 = 488$

$\{9.949, -9.949\}$

22) $8n^2 - 6 = 306$

$\{6.244, -6.244\}$

23) $10n^2 - 10 = 470$

$\{6.928, -6.928\}$

24) $8n^2 - 4 = 532$

$\{8.185, -8.185\}$

25) $4r^2 + 1 = 325$

$\{9, -9\}$

26) $8b^2 - 7 = 193$

$\{5, -5\}$

27) $2k^2 - 2 = 144$

$\{8.544, -8.544\}$

28) $3 - 4x^2 = -85$

$\{4.69, -4.69\}$

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